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USE OF TOBACCO

VS.

PURITY, CHASTITY AND SOUND HEALTH

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PREFACE.

THAT there is a large class of mankind who use tobacco in some one or more of its forms, cannot be gainsayed. That a large proportion of this class do not know the harm it does them, is reasonable to suppose. That a small proportion of this class do know the harm it does, but not to an extent sufficient to make them attempt its disuse, is allowable. That a large—a very large number of boys and young men, who have not yet indulged in its use, are on the eve of doing so, or have already made a commencement, is sadly evident. For the benefit of each and all these, who defile and make impure and unclean their bodies. have I written in plainness and truth concerning its effects physically, intellectually, morally and socially, with a mode for its prevention and cure. The good the reading of it may do depends altogether upon the reader's desire to seek for the truth, to know it when found, to adopt it at once, and practice it forever.

JOHN COWAN.



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"I have often wished that every individual of the human race afflicted with this artificial passion, could prevail on himself to try but for three months the experiment which I have made; sure that it would burn every acre of tobacco-land into a wheat-field, and add ten years of longevity to the average of human life."—JOHN QUINCY ADAMS.

CHAPTER I.

NATURE AND PROPERTIES.

DETAILED description of the history of tobacco is unnecessary. It is enough to know that such a plant as the to-

bacco plant exists, and that it is used by the great majority of men all the world over, and by a great majority of women in certain parts of the world, in either the form of smoking, chewing, snuffing or dipping.

Its Nature.—When analyzed, it has been found to contain three active principles—a volatile oil, which has a bitter taste, and gives to tobacco its peculiar odor. The proportion is small, being about two grains to a pound of leaves. The second is an alkali, which, like the volatile oil, is obtained by distillation. It is a narcotic liquid, having an acrid, burning taste, and in its poisonous

qualities is scarcely inferior to prussic acid. The proportion contained in the leaf is such that he who smokes a hundred grains of tobacco will draw into his mouth from three to eight grains of one of the most subtle of all known poisons. The third is an *empyreumatic oil*, which is produced during the burning. It is acid, narcotic, and in a concentrated form is the poisonous element of tobacco.

Christison, in his work on poisons, says that "the empyreumatic oil of tobacco is well known to be an active poison, which produces convulsions, coma and death;" and Dr. Wood, one of the authors of the "United States Dispensatory," observes that "it is one of the most virulent poisons known, and that a drop of it, in the state of concentrated solution, was sufficient to destroy a dog, and small birds perished at the approach of a tube containing it."

Adulterations.—Any candid reader will allow that the above analysis is sufficient to establish the fact of the positive poisonous qualities of tobacco. But, poisonous as it is in its pure state, it is made even more so through the cupidity and dishonesty

of manufacturers and traders, who, to make it more pungent, to better excite the taste or smell of those who are already half palsied by its effects, or increase the weight, to double the profits, add molasses, resin, beech leaves, common salt, pearl ash, lime, powdered glass, sand, liquorice, cavenne pepper, terra japonica, vellow ochre, etc. All of these substances, and many more, have been detected in tobacco. Pearl ash is mixed with snuff to keep it moist; common salt with chewing tobacco to give it greater pungency; sal ammoniac with snuff, to increase its pungency. The many different flavors and brands of tobacco are produced as much by the different adulterations employed in its manufacture, as by the different varieties of the plant.

Effects Externally.—To a mind desirous of the truth, and open to conviction, no more convincing testimony of the injurious qualities inherent in to-bacco could be had than that of its prompt and palpable effects when applied externally or internally to the human organism, or that of animals.

If a leaf of tobacco is moistened and placed

under the arm-pit, it will cause great prostration, vomiting, and violent sickness, especially after eating. Nausea and prostration have been caused by placing only part of the hand for a few minutes in a strong infusion of tobacco. If this same infusion be applied to the pit of the stomach it will occasion fainting, giddiness, vomiting, and cold sweats. The following is the record of a case that happened under the notice of Dr. Clay, of Manchester, England: "A little boy, aged eight years, had long been affected with tinea capitis, or scald head, which had proved very obstinate. His father applied over his head the expressed juice of tobacco, obtained by wetting the dried tobacco leaves, then placing them between two iron plates and pressed, by which means the juice is extracted. The fluid was applied at five minutes before two in the afternoon; the child almost immediately complained of giddiness and loss of sight, so that his father smiling observed: 'The boy is drunk.' He soon after became sick, vomited frequently and in large quantities; he had also a desire to evacuate the bowels, which he could not accomplish; his limbs tottered, his face grew pale,

and became covered with a cold sweat; his mother helped him to bed, into which he had no sooner entered than he had an involuntary discharge from the bowels; his countenance now apparently sunk; his limbs were motionless, excepting now and then when his legs were drawn toward the abdomen convulsively; he complained of violent thirst, and pain in the bowels; his whole body was bedewed with cold sweat; and at half-past five he expired, only three hours and a quarter after the application. On dissection no organic change was perceptible."

Effects Internally.—The effects of its use internally are, as might be expected, much more prompt in its nerve and tissue disintegrating results. It is related of the French poet Santeuil, that while at table "a potion of Spanish snuff was put by one of his companions, a practical joker, into his glass of wine—this after the bottle had passed rather freely. Soon after drinking the draught the poet was attacked with vomiting and fever, and expired in two days amid the tortures of the damned." Christison, an author already referred to, gives the following case: "An infu-

sion prepared, by mistake, with two ounces and one drachm, instead of one drachm and a half, was used as an injection for a stout man affected with ascarides. In seven minutes he was seized with stupor, headache, paleness of skin, pain in the bowels, indistinct articulation, and slight convulsive tremors—at first confined to the arms, but afterward general. Extreme prostration and slow, laborious breathing soon ensued, and then coma (or deathly fainting), which ended fatally in fifteen minutes."

Another illustration of its fatal influence has very recently occurred in Ohio, reported by Dr. W. J. Tyrell. He was called to see a sprightly little girl, who, three weeks previously, had her upper lip burned and bruised by falling upon a cooking-stove. On the day before his visit she had been as well as usual all the forenoon, but in the afternoon her mother had decided to heal the sore; for which purpose she emptied the ashes from her pipe, then with her finger wiped the oil from the bowl, and applied it to the lip. The effect was violent convulsions, resulting in death within twenty-four hours.

The following case, related by M. Marchant, well illustrates its internal effect, when taken into the stomach:

"A smoker, in drawing air strongly through a pipe partially stopped up, in order to make it more open took it into his mouth and involuntarily swallowed a dislodged plug or thickened tobacco juice. In a short time his head became heavy, his thoughts confused, his speech indistinct; he had noises in the ears, a disagreeable feeling in the pit of the stomach, and dryness of the throat. Believing that the open air would remove these feelings, the patient went out; but the headache and giddiness increased, and he at last fell down insensible, in which condition he was, after some time, found by a passer-by and carried into his house. Copious and repeated vomiting then set in, consciousness returned, but the patient fell into a restless, sleepy state. He had severe headache, general uneasiness and faintness during the whole of the next day. The spontaneous recovery may be attributed either to the small amount of nicotine (the active principle of tobacco) contained in the plug, or to the imperfect absorption of the poison in the latter."

Many cases are recorded where even the fumes of tobacco, taken into the stomach, have caused death; and Dr Mussey records that "the tea of twenty or thirty grains of tobacco, introduced into the human body for the purpose of relieving spasms, has been known repeatedly to destroy life.

Effects on Animals.—In a humanitarian point of view, experiments on animals, with a view to test fully the poisonous and destructive effects of tobacco, are to be deprecated. And yet, as a chain in the argument to convince, they should be allowable. If a smoker will, when smoking his segar or pipe, pass his smoke through water, there will rise and float on the surface an oily material, which is the empyreumatic oil of his segar or pipe of tobacco. Now, if he has a favorite dog or cat he has got tired of, let him take the cat and put one drop of this oil on the cat's tongue and note the result.

Here is a similar experiment described by Dr. Mussey: "The animal uttered piteous cries, and began to froth at the mouth. In one minute the pupils of the eyes were dilated, and the respiration

was laboring; in two and a half minutes, vomiting and staggering; in four minutes, evacuations; the cries continued, the voice hoarse and unnatural; in five minutes, repeated attempts at vomiting; in seven minutes, respiration somewhat improved. At this time a large drop was rubbed upon the tongue. In an instant the eyes were closed, the cries were stopped, and the breathing was suffocated and convulsed. In one minute the ears were in rapid convulsive motion, and presently tremors and violent convulsions extended over the body and limbs. In three and a half minutes the animal fell upon the side senseless and breathless, and the heart had ceased to beat.

"Half an hour after death the body was opened, and the stomach and intestines were found to be contracted and *firm*, as from a violent and permanent spasm of the muscular coat. The lungs were empty and collapsed. The left side of the heart, the aorta and its great branches, were loaded with black blood. The blood was everywhere fluid."

Dr. Mussey also applied two drops of the oil to the tongue of a red squirrel, which was in a moment seized with a violent agitation of the whole body and limbs, and was perfectly dead and motionless in one minute.

Says Dr. Burdell: "I took common tobacco, and soaked it in water about the temperature of the blood, and, after procuring a number of frogs, applied a portion of the juice where the hind legs are connected with the body. The first leaps were violent, and two or three feet in length; but the succeeding leaps grew shorter and shorter, until the muscles became so weak that the animal was unable to draw the legs up again. They remained in the extended position until signs of life were invisible, though I supposed it would recover after a time; but on the third day it began to decompose. The others had it applied on the back and legs, and in less than half an hour life was not perceptible."

The reader, if he be a smoker, should realize the fact that this empyreumatic oil, so deadly in its effects when applied in a concentrated form, is to be found in the smoke he draws into his mouth from his pipe or cigar; and, before the smoke is ejected, the absorbents of the mouth take up, in a greater or smaller measure, in a more or less diluted form, all of the active principles of tobacco, but (in smoking) *principally* this poisonous empyreumatic oil. The reason it does not kill him as quickly as it does a cat or squirrel, is only because of his greater vital powers of resistance; and, it being in a diluted form, the system, in a very great measure, gets accustomed to its presence—tolerating it while it is slowly killing.

Do not the foregoing facts serve to show that tobacco, in any of its forms, is a most active poison. Acting as it does directly upon the nervous organism, it enfeebles, deranges, or extinguishes the vital actions of life—its deleterious effects tending, in the great majority of cases, slowly, but none the less surely, to mental incapacity, physical weakness, and premature death.





CHAPTER II.

ITS EFFECTS PHYSICALLY.



EFORE mentioning the effects of tobacco on the physical departments of man's nature, we will briefly glance at the dif-

ferent

Modes of Use.—It is noticeable that, beside man, there are only two other animals that even touch it—the tobacco-worm, and the African rockgoat—a most filthy, disgusting and loathsome animal. These two animals take it only one way—by the mouth; "but man dries, concentrates and compounds the article; grinds, rolls, cuts and bakes it; and by snuffing, chewing, smoking, smelling, dipping, rubbing, and the like, obtains its strength. Some use it in one form, others in two;

some also use it in all conceivable forms and ways."

Smoking.—The question is suggested: Which method of use is least destructive in its effects, and it is rather a difficult one to decide. In smoking, the fumes of tobacco are merely sucked into the mouth, and then puffed out again. In this process, empyreumatic oil (which is only developed when the tobacco is burned) is carried into the mouth along with the smoke (as well as the volatile oil and the alkalies), and this most destructive poison is absorbed by the many glands of the mouth and carried to the blood, and so by the circulation to all parts of the body, affecting primarily the great nervous centres. Now it is allowed by all as a necessity to man's existence. that he have pure air to breathe. With the tobacco-smoker this is an impossibility, for he not only breathes the air vitiated by his smoke, but he cannot prevent a certain quantity of his smoke. charged as it is with its active poisonous principles, to enter the very delicate air-cells of his lungs, and there doing a vast amount of mischief, to be hereafter enlarged on.

Chewing.—The fact that by chewing more opportunities are afforded to continuously use tobacco, make it decidedly the most harmful mode of using it. Although the empyreumatic oil developed by smoking is not present when the tobacco is simply chewed, the volatile oil and alkali (the last, as already mentioned, being scarcely inferior to prussic acid) are under all conditions present. Of course, the absorbent glands of the mouth have an immensely greater opportunity to take up the active poisonous qualities of the tobacco when chewed than could be done in any other way, and therefore its effects on the system are much more positive and lasting, the waste of saliva is much greater, and the derangements of the digestive organs much more severe.

Snuffing, because of the ease with which it can be adulterated, is as bad, if not worse, than either smoking or chewing. Pure snuff, if such an article could be had, is in itself a cause of many maladies—as impairment of voice, inflammation of the membrane of the nose, determination of the blood to the head, premature age, and even insanity; but when the snuff is adulterated—as it almost in-

variably is—with finely powdered glass, salt, muriate of ammonia (which to obtain urine is added to the snuff), lime, etc., candid-thinking snuff-takers will allow that it is a form of using tobacco that should be avoided.

Dr. Habershon remarks: "It is, I believe, universally acknowledged that the long-continued habit of taking snuff irritates the fauces and epiglottis, producing cough, etc. Nor is dyspepsia the extent of its ill effects—the irritating particles extend through the whole length of the alimentary canal. Several inveterate snuff-takers have intimated to me the irritated state of the bowels, in whom it appeared the mucous membrane was unnaturally stimulated and irritable. The oft-repeated stimulus leads to an enfeebled condition of the mucous membrane, a loss of contractile power, of healthy secretion, and of nervous stimulus; as regards the stomach, dyspepsia is the result; in the intestine, diarrhœa or constipation; in some cases the rectum is principally affected, and it either retains the fœces, so as to form an impacted mass which it is unable to propel, or, if fluid, the same feebleness allows the contents to pass rapidly to

the sphincter, itself sometimes so enfeebled as to be unable to restrain an involuntary charge. Snuff may actually be seen among these discharges."

Mode of Operation.—Tobacco acts on the living body, primarily through the circulation, the poisonous principle being carried to the circulatory system by the absorbents, and in this way the largest and smallest, the nearest and most remote organs of the body are influenced, impaired, and rendered either diseased or liable to disease. Its use tells more promptly on the nervous system than on any other department of the human organism.

It must be understood that the injury done to the constitution is not perceived at once, and this is one reason why it is so difficult to persuade the users of tobacco of its injurious effects. Says Dr. Mussey: "The vital principle in the human body can so far resist the influences of a variety of poisons, slowly introduced into it, that their effects shall be unobserved till, under the operation of an exciting or disturbing cause, their accumulated force breaks out in the form of some fearful or incurable disease. The poison which comes from

vegetable decomposition, on extensive marshes and the borders of lakes, after being received into the body, remains apparently harmless, in some instances, a whole year, before it kindles up a wasting intermittent, or a destructive bilious remittent fever. Facts of this nature show that pernicious influences may be exerted upon the secret springs of life while we are wholly unconscious of their operation."

It Aggravates Disease.—Its use aggravates any complicated disease or diseases, the inherited or developed tendency of which are peculiar to the smoker, and these diseases creep on apace until he sinks into a premature grave. In the great majority of these premature deaths, it is some one or other pronounced disease that was the allowable cause, never supposing tobacco to have had the remotest tendency deathward.

"The use of tobacco," says Dr. Alcott, "not only produces or originates various diseases, but it greatly aggravates the symptoms of those which have their origin in other causes. It also hastens the development of those diseases to which, by inheritance, we are constitutionally predisposed,

but which otherwise might have slumbered. Few things, except, perhaps, ardent spirits, excite those diseases to which we are constitutionally predisposed more rapidly than chewing and smoking tobacco; and this is a powerful argument against the formation or continuation of those habits."

A few of its effects on different persons, and on different parts of the body are below particularized:

Teeth.—It is popularly supposed that the use of tobacco is a preserver of the teeth. This has been demonstrated to be erroneous. The delusion grew out of the fact that it sometimes prevented toothache, by deadening or benumbing the nerves. Any person of an inquiring mind has but to examine the teeth of a smoker or chewer of tobacco to be convinced that they are more worn and in a much worse state than those who do not use tobacco. The teeth decay or wear much faster than is natural, because the first effect of tobacco is to soften them, by contact of the poison acting on the vitality of the parts; and it not only injures the teeth, but the gums also, which recede and become loose about them, and when this ef-

fect has once taken place, there is no possible means of making them adhere again.

Says Dr. Griscomb: "Smoking has long been a popular remedy for the toothache; the sailor's quid has a special reputation for this purpose. We now refer to the case of an unfortunate patient, whose application of the remedy in a concentrated form set up inflammatory action which destroyed a large portion of his jaw. Dr. Paget, his medical adviser, states that to relieve himself from the suffering produced by a decayed tooth, he introduced into the hollow of it some of the oil of tobacco which had accumulated in the stem of his pipe. Violent inflammation of the periosteum (the membrane covering the bone) was set up, ending in death of the osseous tissue. Just under his left lower jaw the skin was ulcerated, and there was a cavity communicating with the dead bone. Dr. Paget removed several of the teeth, and then, without making any incision, contrived with a strong forceps to remove several portions of the dead bone, representing a portion of the base, the angle, and a large part above the angle of the left lower jaw."

Dr. Alcott observes that "the teeth of some to-bacco-chewers, it is true, do not ache; for the to-bacco, at least for a time, stupefies the nerves. Nor are there wanting cases, here and there, of old tobacco-chewers whose teeth, so far as they are not worn out, are free from decay. But such cases are as rare as those of long-lived or healthy intemperance; and they prove just nothing in favor of tobacco. They simply show that the individuals who thus held out had strong constitutions, with no hereditary tendency to diseases of the alimentary canal or the teeth, and that if, in spite of the tobacco, their teeth were comparatively perfect, they would have been still more so, had they wholly abstained from it."

Mouth.—The mucus membrane of the mouth of a smoker is always more or less inflamed, and when the irritation of the parts is kept up, cancer of the lips and tongue oft-times results. Dr. J. C. Warren has observed that: "For more than twenty years back, I have been in the habit of inquiring of patients who came to me with cancers of these parts (the gums, tongue and lips), whether they used tobacco, and, if so, whether by chewing

or smoking. If they have answered in the negative as to the first question, I can truly say that, to the best of my belief, such cases of exemption are exceptions to a general rule. When, as is usually the case, one side of the tongue is affected with ulcerated cancer, the tobacco has been habitually retained in contact with this part. The irritation from a cigar, or even from a tobacco-pipe, frequently precedes cancers of the lip. The lower lip is more commonly affected by cancer than the upper, in consequence of the irritation produced on this part by acrid substances from the mouth. Among such substances, what is more likely to cause a morbid irritation, terminating in disease, than the frequent application of tobacco juice?"

Taste.—The taste of those who smoke, but especially those who chew, is dull, and in many cases entirely obliterated. They know not what it is to have a hearty and enjoyable relish for plain and wholesome food. Everything they eat must be seasoned in the highest manner, and everything they drink must be highly pungent, and whisky, rum, beer, etc., come in appropriately—water, as a rule, being used only as it exists in these drinks.

Hearing and Seeing.—All tobacco-users are affected prematurely with dullness of hearing and dimness of vision. Snuff-taking has a particularly noticeable effect on the hearing, and it may be noticed as a rule that old snuff-takers are more or less hard of hearing. Many persons who chew or smoke are afflicted with troublesome deafness or defective sight at middle age.

Says Dr. Griscomb: "The opinion has long been entertained that tobacco has been a frequent cause of loss of sight. The diseased condition of the eyes produced by it is a species of amaurosis (paralysis of the optic nerve), commencing with symptoms of functional brain disease, and alterations of the supply of blood to the optic nerve and retina. These affections occur in large excess in adult males, being very infrequent in women, and a large portion of those who suffer from it have been smokers.

"Another serious disorder has also been noticed as derived from the practice of smoking—namely, deafness. M. Triquet states that, in smokers and drinkers, an insidious and obstinate form of *otitis* (inflammation of the ear) frequently becomes developed.

"There is a kind of numbness or torpor of the ear, with a sense of cold, but rarely any pain, and no wax in the orifice. Frequently both ears are affected, but one always commenced being so, and is more deaf than the other. The deafness, without being very troublesome at first, rapidly increases. Noises in the ears almost always exist at an early period, and it is of importance to notice that they assume a hissing sound, eventuating in a paralytic condition of the auditory nerve, whereby the sense of hearing is more or less impaired, and often permanently lost. Those patients alone are susceptible of cure who consent to leave off the bad habit which produces the derangement."

Dr. Mussey mentions the case of a Mr. Cummings, in Plymouth, N. H., "who, though he enjoyed at the age of twenty the best of health, commenced the use of snuff, and afterward, at the age of twenty-five, resorted to chewing and smoking. In this way he went on, for thirty years, till he was nearly destroyed. The effects on his senses were striking. At the age of fifty-five he could not read a word in any book without spectacles; and he had already been in the use of them several

years. He had also been subject to a ringing and deafness in both ears for ten years, and at times the right ear was entirely deaf.

"In about a month after quitting his snuff (which was the last thing he gave up), his hearing became correct, and none of his troubles with this organ ever returned. It was many months, however, before he could dispense with spectacles; but he finally got rid of them. At sixty-three his senses were keener, especially his eyesight, than those of most men at his age."

Baldness is produced. Dr. Hoffman argues, in the Pacific Medical and Surgical Fournal, that the use of tobacco, by impeding the circulation and preventing the free and natural supply of nourishment to the hair, occasions baldness. In support of his theory, he says: "A gentleman under forty years of age, and a patient of mine, who had been in the habit of using tobacco to excess for many years, and who had been for the last five or six years both bald-headed and gray-haired, found it necessary a few months ago to quit the use of tobacco entirely. He has entirely recovered his health, which was bad while he used tobacco; he

also has recovered entirely from his baldness, and 'gray locks' have been replaced by an unusually luxuriant growth of natural hair, of as fine a black hue as one could wish to see; he has also lost that sallow, beeswax hue of skin and sickly paleness of color which slaves to the weed so generally have. All of this might be expected as a very natural result, except the growth of hair and its change of color, which, in this case at least, has occurred as one of the results of leaving off a noxious habit."

Indigestion.—There is no one more common cause for dyspepsia than that connected with the use of tobacco in some one of its many forms; and there is nothing very surprising in this, when we consider the immense quantity of saliva expended by the smoker or chewer, which, if used in a legit-imate mode, would with the food be sent to the stomach to aid in the digestive process. And should the smoker or chewer not eject his saliva, he even would get into a worse dilemma—the swallowing of the whole or a part of it, saturated with the poisonous principles of tobacco; so that in either way there is no escape from the dilemma.

"Among the great and almost innumerable fam-

ily of symptoms belonging to indigestion, there is none that may not be caused by tobacco. Spitting up food, pain in the stomach, acidity, heartburn, loss of appetite, dis-relish for all simple articles of food and drink, eructations, flatulency, constipation, constipation alternating with diarrhæa, palpitation, tremulousness, fullness in the head, giddiness, stupor, depression of spirits, weakness of the eyes, wasting of the flesh (but in some cases the opposite extreme), derangement of the liver, pallor of the countenance, and sallowness—such are some among the multitude of symptoms that are known to be caused by the use of this detestable drug."

The Heart is always more or less affected by the use of tobacco. Owing to the intimate sympathy of the heart with the stomach, when the latter is affected by the poison of tobacco the heart is deranged and irregular, and palpitation and heartburn result. There also oftentimes results a "sudden starting and choking sensation, with a feeling of weight and great oppression about the heart, with, at the same time, an extreme difficulty in taking breath. That tobacco is the principal cause

of these difficulties has been proved, as when the article is discontinued the symptoms soon vanish."

Mons. Decaisne, in a communication to the French Academy of Sciences, exhibits another clause in the heavy bill of indictment against its use. In the course of three years he met, among eighty-eight inveterate smokers, twenty-one instances of marked *intermission of the pulse*, occurring in men from twenty-seven to forty-two years of age, which could not be explained by any organic lesion of the heart, thus proving it to be caused by disturbance of the nerves which control that organ. In nine of these cases, when the use of tobacco was abandoned, the normal action of the circulation was restored.

In conjunction with alcoholic drinks, tobacco softens and weakens the walls of the heart and great arteries immediately connecting, producing fatty degeneration of the heart, and ancurism. Persons having these fatty hearts are always liable to sudden deaths; for, without a moment's warning, the heart may burst. Another heart disease produced by tobacco—a very painful and danger-

ous one—is angina pectoris, which "is marked by violent pain in the region of the heart, shooting into the chest, neck and arm, with distressing faintness and prostration. Persons affected with it are apt to die suddenly, sitting in their chair, or lying in bed.

that he is sound and secure because he feels no harm. The deadliest maladies often take silent possession of the vital organs without disturbing the general health. Death steals upon us in our sleep, and touches the walls of the heart, or of an artery in the lungs or brain; the delicate membrane begins to dilate with the pressure of the flowing blood, and grows thinner for months, and even for years, giving no warning of the peril which is imminent. At last a sudden effort, or change of posture, or the distension of the stomach by an ample meal, or a gust of passion, causes the blood to break through the attenuated walls, and in an instant all is over!"

Its Effects on Boys has been noticed by Dr. Decaisne, who, in the course of his investigations on the influence of tobacco on circulation, has been struck with the large number of boys, aged from nine to fifteen years, who smoke; and has been led to inquire into the connection of this habit with the impairment of the general health. He has observed thirty-eight boys, aged from nine to fifteen, who smoked more or less. Of these, distinct symptoms were present in twenty-seven. In twenty-two there were various disorders of the circulation-bruit de souffle in the neck, palpitation, disorders of digestion, slowness of intellect, and a more or less marked taste for strong drinks. In three the pulse was intermittent. In eight there was found on examination more or less marked diminution of the red corpuscles; in twelve there were rather frequent epistaxis; ten had disturbed sleep, and four had slight ulcerations of the mucus membrane of the mouth, which disappeared on ceasing from the use of tobacco for some days. In children who were very well nourished the disorder was, in general, less marked. As to the ages, eight of the boys were from nine to twelve years old; nineteen, from twelve to fifteen. The duration of the habit of smoking was -in eleven, from six months to a year; and in

sixteen, more than two years. The ordinary treatment of anæmia in general produced no effect as long as the smoking was continued; but, when this was desisted from, health was soon perfectly restored, if there-were no organic disease.

Premature Age.—No boy can use tobacco and retain his youthful, healthy, ruddy appearance, as he should otherwise do, into manhood and on to old age. It is a physiological impossibility. The slow poison of tobacco prematurely sharpens the angles and deepens the lines of his face, substituting, for a clear, smooth, youthful, healthy-looking face and perfect form, sunken cheeks, impaired eyes, wrinkled face, flattened chests, dyspeptic abdomen, and spindle legs—surely a most undesirable acquisition.

Other Diseases.—The users of tobacco are particularly liable to diseases connected with the nervous system. Tremors of the nerves, as shown in the non-ability to keep the hands steady when in use, is an often-resulting complaint. Especially is this observable in snuff-takers. It only requires abstinence from it to be convinced of this, for the tremors will then disappear. Paralysis is one of

the effects of tobacco. Dr. Griscomb observes that "affections of the nervous system have enormously increased, in other countries as well as in this—especially in France, and this increase is found to be, in men, almost entirely made up of cases of progressive paralysis (now forming more than sixty per cent. of the total in France); and whenever, in the asylums, the history of such cases has been investigated, their dependence on the abuse of tobacco has been rendered obvious. In 1856, a Committee from the Queen's College of Physicians in London, in a report on the cause of death by apoplexy, within the city, stated that the bills of mortality from this disease were very large, and that, in 7 in 9, cases of paralysis and apoplexy were caused by the use of tobacco. Of this number, more than one-half were caused by snuffing. In conformation of this is the rarity with which this form of disease is met with in females."

Concerning apoplexy, Dr. Clay, of Manchester, England, says, that almost all whom he had known of late die of this dreadful disease were inveterate smokers. Other authors have also stated similar facts. Cancer of the lips frequently occurs among smokers, especially on the side on which the cigar or pipe is held. Tobacco also produces insanity. Dr. Woodward observes: "That tobacco certainly produces insanity I am fully confident. Its influence upon the brain, and nervous system generally, is hardly less than that of alcohol, and, if excessively used, is equally injurious." Dr. Chapman states that he has "met with several instances of mental disorder closely resembling delirium tremens, which resulted from its abuse, and which subsided in a few days after it had been abandoned." Chronic Wakefulness, consisting of "a succession of broken slumbers, interrupted by startings and disagreeable dreams," is a common trouble among old tobacco-users. The loss of Reproductive Power is an occasional result of the excessive use of tobacco, and one that, so far, has been very little inquired into.

Depraved Appetite.—The users of tobacco lose well nigh all relish for simple and healthy food. They crave continually that which is of the most stimulating and unhealthy kind. Pepper, spices, and condiments of every nameable variety are con-

sumed with avidity. There are many other unnatural appetites or desires caused by the use of tobacco; but one of the most noticeable results of its use, and one that is almost invariably present, is the desire it creates for

Alcoholic Liquors.—Those who use tobacco throw off the fluid designed for the stomach, exhausting the salivary glands of their secretions, producing dryness and huskiness of the voice, and consequently thirst is the result—a thirst that is never satisfied with water, but requires for its appeasement something more strong and pungentsomething that can be smelled, tasted and realized, and the only fluids that will approach these requirements are some one of the many poisonous formulas of alcoholic liquors. Again, the use of tobacco impairs the appetite for food, and alcoholic stimulants are resorted to for that strength which food should give. The exceptions are rare, very rare, when a user of tobacco in any of its forms is not ultimately led to use alcoholic liquors; and when they are used in excess, a sure premonition of early death is noted where a person prefers a smoke and glass of whiskey or rum to a meal of plain, healthy food. Next to transmitted tendencies, the use of tobacco is the great cause of moderate and excessive alcohol drinking, with its ever attendant disease-engendering and misery-creating results.

Dr. Mussey thus testifies: "In the practice of smoking there is no small danger. It produces a huskiness of the mouth which calls for some liquid. Water is too insipid, as the nerves of taste are in a half palsied state from the influence of tobaccosmoke; hence, in order to be tasted, an article of a pungent or stimulating character is resorted to, and hence the kindred habits of drinking and smoking."

"A desire is excited," says Dr. Rush, "for strong drinks, and these, when taken between meals, soon lead to intemperance and drunkenness."

A writer in one of the American periodicals, speaking of the effects of tobacco in his own case, says that smoking and chewing "produced a continual thirst for stimulating drinks; and this tormenting thirst led me into the habit of drinking ale, porter, brandy, and other kinds of spirits, even

to the extent, at times, of partial intoxication." The same writer adds, that "after he had subdued his appetite for tobacco, he lost all desire for stimulating drinks."

"The use of tobacco," says Dr. Stephenson, "is one great leading step toward intemperance. But it is a lamentable fact, that very many who stand the most prominent in the temperance reform are grossly intemperate in the use of tobacco."

The New York *World*, in a late issue, asserts that in nine cases out of eleven, where insanity has resulted from inebriation, the primary cause was smoking. It also gives a list of patients in insane asylums, under treatment for "confirmed inebriation, resulting in insanity," who preceded whisky by tobacco-smoking:

Bloomingdale	Asylum,	out of	100,		1	87
Flatbush	66	66	64,			49
Trenton	66	46	56,			48
Columbus	66	66	•74.		٥	62

It requires, as a necessity to the success of the

temperance cause, that tobacco first be dethroned, that gluttony be avoided, and that the laws appertaining to a clean, sweet reproduction be faithfully observed. Temperance, and the high success, the holy joy, and ineffable peace that comes of a temperate life, will then surely follow, and not otherwise, that I can see.



CHAPTER III.

ITS EFFECTS INTELLECTUALLY.

HE general or constitutional effects of tobacco, in any of its forms, is to lower the vital powers of the body, and, as a sequence, all the organs or departments that go to make up the body. The brain, the organ through which the soul of man expresses itself, must also suffer, for a sound mind is to be found only in connection with a sound body.

Noticeably is the memory weakened. A tobac-co-user, especially if he be a snuff-taker, slowly but surely impairs his memory. Nothing is more common than to hear old tobacco-chewers and snuff-takers complain of a bad or defective memory. Snuff particularly impairs the functions of the brain, clouds and enfeebles the understanding.

In fact, tobacco in all its forms is deleterious to the brain and nervous system.

It irritates the selfish sentiments, and the man is rendered cross and irritable, and is disposed to find fault and quarrel.

It dulls the man's perceptions, and the smoker cannot notice or understand the requirements necessary to his every-day existence as clearly and promptly as he would if his brain was not depressed, blurred, and befogged with tobacco.

There are smokers who imagine they cannot read, study, work out any problem, write, compose, preach or lecture without being under the influence of tobacco. This is a very great error. Any candid reader will allow that, to be successful in any of the departments requiring brain-labor, application, concentration, force and energy are necessary. Now tobacco, instead of assisting in this direction, does the very reverse, for it conduces to apathy and indolence—physical as well as mental.

"To meet this argument," says Dr. Gibbons, "instances are adduced of great men—generally statesmen and philosophers—who were inveterate

mokers, chewers, or snuffers. But who pretends that tobacco made them great, or added to their intellectual power? The most that can be said is. that it did not destroy or impair in a sensible degree their mental vigor; that they were great in spite of it. Such cases are at best exceptions, which prove nothing against the general law. There is another point to be considered. Some intellectual men are unable to exert their minds without the aid of tobacco, and this merely from force of habit. Habits always tend to grow into necessities. The man who is used to sleeping in a mill, or with his head nearly in contact with a noisy steam-engine, will be roused instantly from his slumber by the stopping of the mill or of the engine. Does this prove that uproar is anodyne? or that stillness disturbs sleep?

"So there are men who can perform much intellectual labor under the influence of a quart of brandy in the day; and without the brandy they tremble and fail. Does this prove that brandy is a useful mental stimulant? Or rather does it not demonstrate that they have made themselves the slaves of habit and the victims of disease, and

that they need to break the galling chain, and place themselves under the influence of the laws of Nature and of health, to be restored, if possible, by a slow recuperation, to a sound and healthy condition."

To such an extent does tobacco sometimes affect the brain, that it has been known to produce insanity. In the reports of the lunatic asylums of this and other countries, this is very frequently included in the list of causes of this sad condition, and the evidences of its influence upon the mental powers are so direct and clear as to be unmistakable. The great increase in the number of lunatics during recent years, in various civilized countries, presents a marked parallel with the increased use of this poisonous plant.

For example, in his report for 1866, Dr. Kirkbride, Superintendent of the Pennsylvania Hospital for the Insane, states:

"Six cases were clearly attributable to the use of tobacco. The pernicious effects thereof are much greater than is generally supposed. In certain temperaments it produces symptoms of an

alarming character, and not infrequently is the cause of obscure and obstinate ailments, connected especially with the gastric and nervous systems. This has often been seen here very strikingly, when patients, after being without a supply for a long time, have again commenced its use."

A very important fact, illustrative of the relation of tobacco and insanity, has recently been brought to light in France by a paper laid before the Academy of Sciences—namely, that insanity increases in proportion to the amount of tobacco used. Thus it is said that between 1812 and 1832 (twenty years) the tax on tobacco produced twenty-eight millions of francs, and the lunatic asylums of the country contained eight thousand patients. Since that time the tobacco revenue has reached the sum of one hundred and eighty millions of francs, and the number of lunatic and paralytic patients has reached to forty-four thousand.

This increase of revenue is about six hundred and fifty per cent., and the increase of the disease five hundred and fifty per cent.—very nearly the same proportion. These facts are certainly well worth the consideration of every human being, especially those with whom the pernicious habit has already become a second nature.



CHAPTER IV.

ITS EFFECTS MORALLY.

as has been clearly shown—it must of a necessity be morally wrong; for it is a physiological law that "whatever depraves or irritates the body, thereby depraves the nervous system, and through it the brain, and thereby the mind." A man's mind—his thoughts, his expressions, his deeds, are influenced by the way he uses or abuses his physical nature. Tobacco is, in its very name and associations, filthy, and—taking no heed of the harm it does—how can clean, pure, just, moral feelings and actions originate or be developed in the mind. As well suppose—if such a

thing could be supposed—that Christ, while living His exemplary life on earth—teaching and preaching purity, chastity, love and charity-smoked, snuffed and chewed. Does not the very thought sound sacreligious? And yet ministers—followers, preachers, and expounders of His laws and doctrines-foul their bodies and taint their souls with the filthy, poisonous weed. Can such men, or their followers, lead Christ-like lives-high, moral lives? I think not. "Try, if you can, to entertain the idea of a gluttonous eater, a winebibber, or a tobacco-user, in connection with holiness of heart? There is something unnatural, revolting, repulsive in the association. Just as the bodily appetites and the outward senses are depraved, does the inner man, the moral nature, become gross. The pure spirit will not, cannot dwell in a filthy tenement. There is a natural correspondence between material and spiritual things, so that the qualities of one denote the character of the other. A professor of religion and slave of tobacco may mean well, but a hallucination pervades his moral nature exactly proportioned to the amount of tobacco he consumes. He may have an intellectual consciousness of right and wrong, but the moral sense is blunted; he does not feel duty if he sees it; nor does he feel truth as he perceives it. He may acknowledge, in all candor and sincerity, that tobacco-using is a pernicious custom, morally wrong; yet he may find an impulse within, a law of his members, artificially produced, prompting him with insatiate cravings to continue the practice, and this artificial law may be stronger than his natural reason and conscience combined. Is not tobacco-using a palpable violation of one of God's laws implanted in our organization? Is not an infraction of any one of God's laws a transgression and a sin? And if a man habitually lives in the violation of one of God's laws, will not the transition be easy and natural to a violation of other laws? And lastly, how can any man stand up as a moral teacher, who, in his own conduct, commends to his fellowcreatures à life of continual transgression against the laws of his being?"

The use of tobacco, affecting as it does the

physical nature-lowering, tainting and fouling it -must also in like manner affect the spiritual nature; for so intimately are the two blended, that nothing affects the one without influencing the other. A man's thoughts, his desires, his aspirations, are greatly influenced, if not altogether directed, by the elements he uses to renew and build up his body. If his body is renewed with pure and easily assimilated food, as a sequence his spiritual nature will be built up in harmony. If gross food is used, and especially if it be tainted with tobacco and alcoholic liquors, the spiritual part of his nature will be of the earth earthy. This being so, the question naturally suggests itself: Can a man who uses gross food, alcoholic liquors, but particularly tobacco, be a Christian—a follower of Christ-of His just precepts and pure life? I think not. Had Christ been a user of tobacco and a drinker of rum, whisky or beer, it might be so; but as it is, how can it be? The use of tobacco, tainting as it does the physical nature of man, how can it help tainting the etherial essences that constitute the soul of the man. This soul leaves the body for the next world with a character formed and endowed through the physical influences of the body while on earth—leaving it with a character not consonant with the requirements necessary to those entering heaven; for nothing unclean or impure shall enter therein.



CHAPTER V.

ITS EFFECTS SOCIALLY.

HE use of tobacco never by any manner of means leads men up in the scale of social progress. Its very nature prevents such a growth. Its effects, and especially the associations connected with its use, always, in a greater or less degree, in a longer or shorter time, lead downward in the scale of civilization, and away from the culture, refinement, delicacy of feeling and purity of thought that belong to those who observe the laws of their being. The fact that great generals, statesmen and philosophers use tobacco does not alter the assertion; for a man may be great and not good. He may be a great general, an able statesman, a profound philosopher, or a capable President, and yet lack true

culture and refinement, and all those Christian graces that in their expression indicate a clean, sweet body, a pure spirit, and lovable soul.

Smokers are seldom social persons. Their thoughts and ideas are narcotized and rendered inert, and this results in their being taciturn. When they do speak, it is only in monosyllables. This renders a smoker, if he be confirmed in the habit, an essentially selfish person, seldom caring for aught outside his own selfish interests-disliking to be disturbed when, with the fumes of tobacco, he renders all his ideas indistinct and unreal. Through the blurred, misty thought that floats through his brain-chambers he builds up plans and purposes that will result in the same conditions they were originated in-smoke. A man, to be successful in this intensely progressive age, must have his body pure and strong-but especially must his brain be sharp, clear and active quick to understand, prompt to act. A tobaccouser cannot have either such a body or such a brain, and therefore they lack, or disable, the essential requirements necessary to success in life's endeavors.

The quality of selfishness in many tobaccousers is noticeably manifested when they eject their polluted saliva or their smoke-tainted breath in the presence of those of their fellow-men who may or may not relish the sight and contact. In public buildings, on public streets, on lines of travel, the air and surroundings are made distasteful or unbearable to some man or woman whose love of the true, the pure and the beautiful is of a high order. But what cares the tobacco-user? In fact, he cannot care, for the simple reason that his huge abnormal selfishness prevents him seeing himself as others see him; prevents his realizing the fact that he is tainting the air that others desire to breathe, as the Creator intended it should be breathed—pure; prevents his noticing the supreme disgust which every ejectment of his mouthful of saliva causes on those whose ideality is largely developed; prevents his ever knowing the antipathy and distaste his friends, especially his lady friends, have to holding converse with him, tainted and surcharged as are his breath, his hair and clothes with the foul flavor of tobacco. He cannot see these things, and he seldom knows

them, for he has no friend with courage enough to explain and enable him to realize his exact position as a user of tobacco relative to his social relations.

The Rev. Dr. Baldwin observes: "There are no laws more universally established, in refined society, than those which demand cleanliness of person and cleanly habits in all the intercourse of men with each other; and which proscribe all offensive or disgusting practices, as suited only to savage and barbarous nations, or to some of the lower order of animals. The rules of refined society on such matters, and genuine politeness, are always one and the same thing. The three modes of using tobacco are violations of all rules of cleanliness. It is not clear which is the greatest violation. We seldom or never hear even the victims of these habits defending them against the charge of being offensive and disgusting; and yet, strange to tell, they are not only tolerated among men who belong to the highest orders of society, but among thousands of such, especially the young, they have grown into such a bewitching fashion that one is ashamed to be seen among his companions unless his mouth is armed with a cud, or his head enveloped in tobacco fumes. Some carry these filthy practices into all the society they frequent, endangering all who do not keep at a distance, or to the windward; endangering all that female ingenuity has devised to make home pleasant, or poisoning the air that all are compelled to breathe. Others there are, better educated, more refined in manners, who never forget that their habits are utterly inconsistent with the rules of good society, who drop the cud or cigar at the door they enter, and who willingly take the 'smoking car,' or the smoking end of the steamboat. But even such seem to forget that it is easier to part with the cigar than it is with the fætid breath it has occasioned, which often affects others even to vomiting. They cannot know how nauseous the weed is to others, when it has become so delightful to them. That such unnatural and offensive habits should ever have found a place outside of the precincts of savage life is a wonder. It is a greater wonder that men who claim to rank with the refined should allow anything in their habits which is to unfit them for society; and that,

when they find themselves severed off, like lepers of old, shame does not kindle into indignation, and indignation lead to reformation; but the greatest wonder of all is, that the fair sex, who take the lead in all that is refined and lovely, in enlightened lands; married ladies, who have a deep interest in the habits of husbands and sons, have not, long since, brought all the power of their persuasive influence to bear upon these habits, and so have shamed them out of the world."

Says Henry Ward Beecher: "The habit of using tobacco leads men to *vulgarity*. I do not by any means say that every user of tobacco is vulgar, or that every one who betakes himself to it will, of necessity, become vulgar. But, as a matter of fact, users of tobacco grow indifferent to the feelings of others, and habitually keep before the eyes of their companions disgustful things, which true refinement would hide or suppress. Even brute animals, moved by mere instinct, learn to hide the excretions of the body. The muchabused pig prefers cleanliness. Give him pure water and a clean bed, and he will keep himself clean.

"But, whatever rare and polite exceptions there may be, it is undeniable that the users of tobacco become indifferent to others' feelings, and shock the tastes of men with scarcely the consciousness of offending. The chewer squirts his saliva as if he were a liquid artillery-man. The smoker carries in his hair, his raiment, and in his breath, the fætid odor of tobacco. To some the fresh smoke of good tobacco is not disagreeable. But the residual smell which lingers in the pipe, on the clothes, or on the person, is disgustful to every one. If one will use tobacco, he should at least thereafter carefully purge and purify himself. But I have observed that persons who in all other things have gentlemanly instincts, in the use of tobacco seem to lose delicacy and generosity. I see a great degree of selfishness, and of indifference to others' comfort and feelings in the use of this article. I do not say that tobacco brutifies men's feelings. But I have noticed that users of tobacco are, as a class, less careful of offending the tastes of others than are their fellows of the same rank in life who do not use it.

"There is an argument of personal liberty and

of personal purity that has always seemed to us should be sufficient, with a generous and honorable nature. The *habit* of using tobacco, once formed, is well-nigh invincible. Now, no man of self-respect, not already entangled, should choose to go into bondage, to become a slave to matter of sensuous enjoyment.

"There is also a reason of personal cleanliness. No man who habitually uses tobacco but must be offensive to delicate tastes. It is a matter of proper pride for one to be conscious that his person is pure, his skin sound, his mouth clean, his eye cool and clear. If one is unwilling to wear a filthy coat, how much less should he be willing to carry a filthy person? Now and then a tobacco-user may, by great care, hide the effects of it on his person. But in far the greater number of instances, even among well-bred people, one can at once see or smell, or both, the signs and effects of the noisome weed."

The great mass of mankind—the exception being those whose natures are strongly individualized and original—are greatly susceptible to example, much more so than to precept. They pos-

sess, in a large measure, the quality so characteristic of the monkey tribe—that of imitation. If a renowned man—be he famous as a poet, a warrior, or a ruler-smoke tobacco, this great crowd of the mediocre of mankind think it a step, or several steps, in the direction of fame and renown that they too smoke. They imagine—be they children in pinafores, or grown-up babies-that, with a cud of tobacco in their mouths, or a pipe or cigar between their lips, the world will look on them with wonder and admiration, and they themselves will feel big with importance, and equal in all manly characteristics with the renowned poet or able general. If it only required a chew of tobacco or a segar to make a boy a man, or mediocrity famous, the laws that now govern the growth of things would require an amendment, or a series of by-laws. But fortunately this will never be necessary, for it is with the use of tobacco as with swearing—an imperious, blustering swearer is always a coward at heart. There is no exception to this rule, and no exception to the rule that a boy or man who, because some man he admires uses tobacco, he, to emulate him or to take on an appearance of manhood, also smokes, possesses as few of the qualities that constitute perfect manhood as does the swearer those that constitute true courage.

"It has been said, with great force and truth, that the respectable dealers in and moderate drinkers of intoxicating beverages were the 'Devil's decoys,' by which weak-minded persons were led into habits of confirmed drunkenness. The gutter-drunkard serves as a frightful example to warn others from his ways; but the man who can use intoxicating liquors and keep up a respectable exterior, influences others to imitate his drinking practices, some of whom are morally certain to improve upon it so far as to find their way to drunkard's graves. The same principle applies with the same force to tobacco-using. The ragged, bloat-faced, grog-shop loafer, who labors to defile himself at a black, dirty, broken pipe, would never mislead a single descendant of Adam into the habit of smoking tobacco. But the outward gentleman; the man of respectable ability; the person of rank, standing, and influence in society; the individual who makes a comely appearance in

the streets, and is clad in clean garments, and who puffs with grace and dignity an elegant 'Principi' or delicious 'Havana,' will very naturally awaken a spirit of emulation in the thoughtless multitude, who, by the way, happen to be the largest class in the community."

No man can live a wrong life without influencing for the worse, in a greater or smaller measure, those immediately connected with him. This is especially noticeable of the husband who is a tobacco-user, and his influence on his wife and children. The great majority of women-mothers, wives and sisters—have an in-born dislike for tobacco and tobacco-using men, and when they cultivate the acquaintance of such, and especially when they marry such, it is done against the instincts of their pure and refined natures. The exceptions are where women have transmitted to them, from their tobacco-using parents, not only a love for the weed, but a desire to snuff and smoke. Think of a tobacco-chewer or smoker, with mouth, lips and breath foul with the odor, and the whole body tainted with the filthy weed, kissing a clean, sweet, beautiful, rosy-cheeked woman. Bah!

How the majority of women ever do it, or allow it to be done, is to me an unsolved problem. Purity and filth, beauty and dirt, never do and never can affiliate. When it is asserted they have done so, it will be found to be only in appearance, never in reality. There can be no harmony in lifeplans, no true love, no blending of souls, between a husband who uses tobacco and a wife of natural and pure instincts.

There are several reasons why this must be so, the principal one of which is that a tobacco-user is—cannot help being—a sensualist. As already mentioned, tobacco and alcoholic liquors go hand in hand, and no man, I care not whether he be saint or sinner, can use both, moderately or in excess, without developing the animal, the gross and the sensual that is within him. A life of chastity, and a life tinctured with tobacco and alcohol, are antagonistic—as wide as the poles asunder. In the exercise of this lust, the result of tobaccousing, appears the great wrong done the wife—a wrong that results in more ill health, more unhappiness, more mated misery, more separations and divorces, than any other cause yet established.

There never was and never can be any love where lust is predominant, and where there is no love there must be unhappiness.

Says O. S. Fowler: "Tell me a tobacco-chewer is a virtuous man! I know better. He may not have broken the seventh commandment outright; but as 'he that looketh on a woman to lust after her committeth adultery with her in his heart,' so tobacco, in all its forms, causes that sinful, sensual tone or cast of the love-feeling which constitutes the very essence of licentiousness.

The influence of tobacco upon amativeness is powerful, and powerfully vitiating. No man can be virtuous as a companion who uses tobacco; for, although he may not violate the seventh commandment, yet in the feverish state of the system which it produces, it necessarily causes a craving and lustful exercise of amativeness, just as alcoholic liquors cause such amatory cravings, and for the same reason. As alcoholic liquors and the grosser forms of sensuality are twin sisters, so tobaccoeating and deviltry are both one; because the fierce passions of many tobacco-chewers, as regards the other sex, are immensely increased by

the fire kindled in their systems, and of course in their cerebellums, by tobacco excitement. Ye who would be pure in your love-instincts, cast this sensualizing fire from you. In fact, its perverting influence upon the entire mentality accords with the love-illustration just given. Mark the point! It corrupts and depraves the body, and through it sensualizes and sinfulizes all the faculties of our being; for moral depravity consists not in the excessive exercise of our faculties, but merely perverted action. The constitutional effect of tobacco is to pervert and vitiate the entire being, from the crown of the head to the sole of the foot, in all the ramifications of mind and functions of body."

The husband's influence does not stop with the harm he does his wife. The effects of his wrong living, of his violation of the laws of purity and health, bad as they are in his wife, are much more so on his children. A tobacco-loving, whiskydrinking father cannot help having children that will take after him in these respects. Like begets like, in the very smallest as well as the greatest of reproductive efforts. A wife, occupying the same bed as does her husband, absorbs from the millions

of pores that cover his body the excreted poison of his tobacco-steeped existence; so that, beside the direct effect of the father on the offspring, there is this transfusion of poisonous essences ever going on. This being so, it cannot be otherwise than that the child will be born and grow up with tendencies that will make him a lover of tobacco, and its associate, alcoholic drinks.*

Says Dr. Trall: "Many an infant has been killed outright in its cradle by the tobacco-smoke with which a thoughtless father filled an unventilated room. Many and many a time has the doctor been summoned in haste to a child, taken suddenly and alarmingly ill with spasms, convulsions, worm-fits, choking, strangulation, or 'strange spells,' produced by no other cause than tobacco-smoke in the room—a cause too often unsuspected by both parents and physicians. The strong, rank, fœtid, narcotic breath of a habitual tobacco-user is enough to almost strangle and quite sicken

^{*}This subject of the use of tobacco and alcoholic liquors, and their influence on amativeness, continence, and hereditary transmission, is fully enlarged upon in my large work, "The Science of a New Life," to which the reader whose desire is for further information is referred.

the new-born infant which sleeps in the same bed. Who but the All-seeing knows how many infants are murdered soon after they are born in this way; or, if not directly killed, rendered sickly, puny, nervous and irritable in body, and peevish, dull and stupid in mind, by being poisoned with a to-bacco atmosphere during the first days of their existence."

But of all the harm done by the use of tobacco, physically, intellectually, morally or socially, the greatest harm and mightiest wrong done is that of transmitting to the unborn the appetite for the filthy, unclean, impure, disease-creating, misery-engendering taste and desire for smoking, chewing, or snuffing tobacco.



CHAPTER VI.

OBJECTIONS CONSIDERED.

ONCERNING the reasons advanced and excuses offered for using tobacco—and they are many—none of them will bear analyzing.

An oft-repeated assertion, that tobacco is harmless, is made by those who point to the fact that old men, some of them very old, have all their lives used tobacco without its apparently harming them. This phenomenon can easily be explained.

I. Such men have been endowed with strong, tough and enduring constitutions—constitutions that will bear the slow and gradual effect of such poisons as are inherent in tobacco and alcoholic liquors much better and longer than men of a low quality of vitality. But it should be understood

that such strongly endowed physical natures would last much longer if they had not used such poisons. 2. It will be found on careful examination that these long-lived tobacco-users are really dead long before they leave this world—that is, years before they do die they lack intellectual vigor—power of memory, clearness of perception, logical reasoning, and the sharp, active, prompt mental ability that is possessed by all healthy men in the full, ripe vigor of life. Their whole mental nature, in harmony with their physical nature, is by a life's efforts narcotized, smoked, nummified, and rendered inert-dead, though alive. I have never vet seen an exception to these facts. 3. The fact that these old tobacco-users had transmitted to them strong, tough, and enduring physical organisms, easily accounts for their apparent immunity from early physical death. But it will be noticed that these long-lived men never give origin to long-lived children—never have children who inherit their male parents' original endowment of splendid physical qualities. It is always the reverse of this—the children are puny, sickly, short-lived, and if they grow up to man's estate,

they will use tobacco as long as *they* live. As for the children's children, what think you *they* will amount to in the race for wealth, for honor and success in the world's endeavors? Why, it were better had they never been born.

Says Dr. Charles Clay: "It is true the injury on the constitution of man, by the common mode of using it, is not perceived at once; and it is difficult to persuade the lovers of tobacco of its bad tendency. But a series of complicated disorders creep on him apace, his life becomes insupportable, and he sinks into a premature grave; but to tell his friends, around his last resting-place, that tobacco had hastened the catastrophe, they would tell you of some hard, iron constitution who had smoked all his life, and lived to a very old age. The very individual quoted, however, is often a walking mass of chronic disease, a magazine of filth, and a fac-similie of human wretchedness-a sallow, cadaverous countenance, with scarce a ray of hope imprinted upon it."

Dr. Mussey observes that "it is sometimes urged that men occasionally live to an advanced age who are habitual consumers of this article;

true, and so do some men who habitually drink rum, and who occasionally get drunk; and does it thence follow that rum is harmless or promotes long life? All that either fact proves is, that the poisonous influence is longer or more effectually resisted by some constitutions than by others. The man who can live long under the use of to-bacco and rum, can live longer without them."

Of its effects on the intellectual and physical vigor of old smokers, Mr. George Trask relates a very applicable illustration:

"About fifteen years ago we gave a lecture on the South Shore, in which we aimed to show that, as the common use of tobacco diminished appetite, diminished blood, muscle, health and strength, it must inevitably abridge life, and, if so, the habit amounted to suicide in the constructive sense; hence it was a violation of the sixth commandment, which says: 'Thou shalt not kill,' and hence a sin. As we closed, a clergyman rose and observed: 'I believe the argument in this lecture conclusive; I believe that thousands of tobaccousers are poisoned to death, and are chargeable with cutting short their lives. But I have a diffi-

cult case to solve, and I wish the lecturer to solve it. I knew a man within ten miles of this place who smoked his pipe to the day of his death, and he lived to be one hundred and four years of age!'

"We confess we were puzzled; the question was much to the point, and the audience laughed at our expense. At last we hit upon the Socratic style of argument, and interrogations helped us out of a dilemma, where grave argument had been of little or no avail.

"Sir, we inquired, are you sure the old man lived and smoked till he was a hundred and four?

"'Yes,' he replied.

"How did he look?

"' He looked like an Egyptian mummy."

"Had he moral sensibilities?

"O, no; he appeared to have no sense of God or religion whatever."

"Did he manifest any public spirit? Did he like good schools, good roads, good order, and the like?

"'O, no; no more than a mud-turtle or an oyster."

"Had he a family?

"'Yes, a large one and a mean one—altogether too large.'

"Did he love his family?

"No, I think not."

"Did he hate his family?

"'No, I think not."

"And, in a word, did he love anybody, or hate anybody, dead or alive, in this world or in any world?

"' No, I think not."

"Well, well, brother, the conclusion of the whole matter is simply this: the old man was dead fifty years ago, only you didn't bury him!"

No man who uses tobacco can live to an old age and be physically and mentally healthy. It is a physiological impossibility, and when exceptions occur it is because the man's strong inherent vitality resists step by step the encroachments of the insidious poisonous effects of the narcotic and its disease-engendering accompaniments.

Among the very common erroneous reasons advanced for using tobacco is that it facilitates digestion. It is rather surprising that man, of all

the animal kingdom, is the only one who has made this wonderful discovery; for if it is a necessity in the aiding of man's digestion, why not as much so in that of the horse or ox? The supposition that it aids digestion is altogether a factitious one, and is to be explained in this way: all tobacco-users are more or less dyspeptic—their stomachs are always, in a greater or smaller measure, inflamed. Now, when a meal of food is sent down to one of these stomachs to disintegrate and dissolve, it does so under protest—a protest that is expressed in fullness, uneasiness and pain. Just here comes in the supposed benefit of tobacco, a chew or a smoke of which always allays these uneasy sensations. How does tobacco do this? By simply narcotizing and deadening the pain. But note, that every time this after-meal smoke or chew is used, every time the stomach and alimentary canal are more or less rendered unfit for their office -that of digestion and assimilation, and with it, at the same time, is lost the relish for food. The physical powers of a confirmed tobacco-user and drinker of alcoholic liquors always fail at the stomach first. The man who cannot digest his food

without the aid of tobacco-smoke, and who also has lost his appetite for plain food, has entered the road that leads to bodily suffering and premature death.

An equally absurd reason for using tobacco is that of its supposed influence in preserving the teeth. None but smokers who are hard pushed for an excuse advance this as a reason. "The opinion that the use of tobacco preserves the teeth," says Dr. Mussey, "is supported neither by physiology nor observation. Constantly applied to the interior of the mouth, whether in form of cud or smoke, this narcotic must tend to enfeeble the gums, and the membrane covering the necks and roots of the teeth, and in this way must rather accelerate than retard their decay. We accordingly find that tobacco-consumers are not favored with better teeth than others; and on the average, they exhibit these organs in a less perfect state of preservation. Sailors make a free use of tobacco, and they have bad teeth."

Some use it to prevent obesity. Tobacco never yet made a fat man lean. An examination into the habits of the members of the "Fat Men's As-

sociations," at this time springing up in different parts of the country, will prove this. It is seldom that an obese man is seen without either a pipe or cigar between his lips, or a chew in his mouth; and yet they continue to grow obese, until they represent a mass of diseased cellular tissue that is simply frightful to look upon.

An opinion is prevalent in many communities that the use of tobacco operates as a preservative against infectious, epidemic and malarious diseases. A moment's reflection will convince any reader that this is an error. In a former part of this work it has been conclusively shown that it invariably tends to weaken and depress the powers of the nervous system, depriving it of its power of resistance against epidemic and all other diseases; and when cholera makes its appearance, the users of tobacco and alcoholic liquors will always be among the first to be attacked and among the first to die. Of malarious and other fevers the same may be said.

Dr. Samuel E. Wells, in the Medical and Surgical Reporter, remarks: "In reply to Dr. W. S. King's inquiry in the Reporter, relative to the prophylactic virtues of tobacco in malarious fevers, I beg leave to say: my observations for the last twenty-five years as a practitioner of medicine, part of the time in the Chickahominy region of Virginia, and the last twenty years on the Eastern Shore of Maryland, do not corroborate the theory that tobacco possesses any such property. Habitual chewers and smokers, both men and women, have been as frequently numbered among my intermittent cases, as those who have never used tobacco."

Dr. James H. Claiborne, of Indiana, in a letter to the same medical journal, writes: "My practice is principally in the malarial region of the Wabash and Black rivers. I have good opportunities for observing the prophylactic effects of medicines, etc., and I have utterly failed to observe any prophylactic properties of tobacco in malarial diseases; but, on the other hand, see numerous cases of malarial disease in persons who are habitual users of the 'filthy weed.'"

Of its use as a preventive of bronchitis, Dr. R. T. Trall writes: "It has been argued, even by medical writers, that the habitual use of tobacco is

a preventive of bronchitis. I have seen too many cases of the worst forms of this disease in confirmed tobacco-users to credit such closet theory. A similarly superficial observation or reasoning process has induced some medical men to believe that the use of ardent spirits, or the ague-andfever, was a preventive of consumption. Although tobacco-users, spirit-drinkers, and ague-and-fever subjects do all frequently have bronchitis and consumption, it is nevertheless true that these supposed preventives do sometimes obviate one disease by killing the patient with another. If a man uses tobacco enough to waste all his vitality in ten or twenty years, he may die dyspeptic, and so escape bronchitis, as the man who produces an active form of alcoholic disease may die of nervous exhaustion, and escape every other; or the consumptive who gets the ague-and-fever may die of diseased liver, instead of ulcerated lungs. It is very true, that whilst the system is possessed of one disease, or occupied with one poison, it is the less liable to all other diseases and every other poison, although it is not less liable to death. This idea of keeping off diseases by preoccupying the system with a poison, or a specific morbid condition, is both nonsensical, unphilosophical, and ridiculously absurd. Health—full, perfect, vigorous, functional integrity, in all the physiological and mental powers—is the only conservative condition that science knows or Nature owns."

And lastly, as to the pleasure to be derived from smoking, chewing or snuffing tobacco, the Rev. Dwight Baldwin well says: "We cannot sufficiently wonder at the folly of thousands, perhaps millions, who chew or smoke tobacco, thinking it adds to their animal enjoyment. That savage nations should seek enjoyment in this way is not wonderful. But all the civilized world ought to know that the highest and most permanent corporeal enjoyment belongs only to man in perfect health. When every organ of the body is in healthful play, doing well and uniformly the work assigned to it in the system; neither excited above the tone of nature, depressed below it, nor disturbed by noxious powers; when the mind is active, the spirit buoyant, the food sweet, and exercise and labor equally delightful, who does not know that all the drugs in the world would not

more heighten the enjoyment of such a man than they would that of skipping lambs or gamboling children? You can no more improve Nature's established and happy medium of action in the body, than you can the water which God pours out of the clouds, by mingling it with brandy or arsenic. For every ounce of pleasure we extort from the body by artificial means, we shall doubtless always pay in pounds of pain."



CHAPTER VII.

MODE OF PREVENTION AND CURE.

- O far, we have seen that the habit of using tobacco is—
- 1. Disease-engendering. It not only originates numberless diseases that tend to impair the health, but it also aggravates and hastens diseases caused by other influences, and altogether greatly shortens life.
- 2. It leads to intemperance and a love for alcoholic liquors. This in no wise can be gainsayed—the facts are every day exemplified and easily observable.
- 3. It develops, sexually, the worst part of a man's nature—the low, gross, sensual, unchaste and incontinent.
 - 4. The habit of using tobacco is an expensive

one. I have offered nothing statistical concerning the waste of time and money involved in its use, and do not intend to do so; for if the facts already mentioned will not lead a user of it to adopt a change of base, the most elaborate and frightful statistics ever wrought out will not do it.

- 5. It is a filthy habit. This can be understood and appreciated without being dilated on. The three habits of smoking, chewing and snuffing are violations of all rules of cleanliness and purity.
- 6. It is a growing habit. The habit once begun, there is no limit to its extent but with the termination of life.

And lastly. It is a useless habit. No good—absolutely none—results to the consumer from its use, but otherwise the very reverse—discomfort and disease.

Such being the facts—facts that cannot well be disputed—we will allow that the reader, if he be a user of tobacco, desires to give up its use—to free himself from the trammels that bind his soul in the narcotizing and enfeebling grasp of tobacco.

In arriving at this decision, the first thing that suggests itself to his mind is: Shall I leave off its

use gradually or suddenly? AT ONCE AND FOR-EVER is the resolve that will lead to freedom, and none other. A resolution to quit its use for a month or a year is only coquetting with the evil, and invariably results in a return to the habit. O. S. Fowler well and forcibly says: "To break off gradually is only to tamper with the scorpion, and be stung more deeply thereby. Cut off the snake's HEAD! "But I can't," you reply. What, can't stop, when you know you are perpetrating such wide-spread destruction upon mind and body! Are you such a slave to a low-lived, disgusting passion, and can't give it up? Are you so pitiiable weak, and own it at that? Then no more call yourself a man! Own it, aye, that your masculine energy is not sufficient to free you from your grovelling passions. Own, that though you know you are doing wrong, you can't stop! Then own up, and done with it, that you are a poor, weak THING; that your MANHOOD is emasculated, and your MORALS subjected. But you CAN break off. This one motive alone, if you will allow it due consideration, will compel you to stop -the ravages you are perpetrating upon your

body and soul. You have a conscience, and you are bound by the highest obligations of your being to follow its dictates. And that conscience warns you never to put another cud or cigar into your mouth, because you thereby do violence to so exalted—so God-created and God-like—a being as yourself. Think you no more of yourselves, no more of your moral purity, here or hereafter, than to defile or debase yourselves thus! Rise at once, O sunken mortal, in the high-toned dignity of moral principles. Put the foot of moral determination upon the head of the serpent passion, and cast him out forever from you, and in a few days your triumph will be achieved. Do not break off in part only, nor allow the lurking idea that if you can't do without it you can return to it, for such lurking will prevent the achievement of your object; but resolve, be the consequences what they may, to break off forever; for the harder it is to break off the more you require to, because the more you crave it the greater the injury it has done and is doing you. Break off, and all the gold of California could not bless you as much as that single decision and practice. In a few

days you will get habituated to do without it, and in a few weeks you will be a newly organized man-not in your physiology merely, but in your whole tone of feeling and cast of mind. A pure, virtuous, elevated, holy, aspiring state of mind will take the place of that corrupt, debased cast of your faculties which tobacco has produced, and your progress in all that is good or great will be ten-fold more rapid than it now is. By all the value you place upon yourself, then; by all the solemnity of the laws of your being; by all the authority of the direct command from God, not to do violence to body or mind; you are thereby imperatively commanded to abstain, at once and forever, from this body-destroying, soul-vitiating narcotic, in all its forms."

Many confirmed tobacco-users imagine that to break off suddenly will result in great harm. Thousands of confirmed smokers, chewers, snuffers, as well as drunkards, are sent to our penitentiaries, where they are suddenly deprived of their tobacco, and yet no bad consequences follow, but always the reverse; for when they return to society they are improved both in health and appear-

ance. The uniform testimony of the managers of prisons is, that none are ever injured by the sudden quitting of the narcotic, but that in a few days their uneasiness and agitation subsides, and they gradually take on natural and healthy tastes and desires.

The sudden quitting of the use of tobacco, followed as it is in many cases by great prostration, requires a larger degree of moral firmness than most men possess, else there would not be so many failures in attaining freedom from the habit.

The symptoms that will be indicated in the confirmed tobacco-user, when he has quit its use suddenly, are thus described by Dr. Trall: "In an hour or two the mouth begins to feel husky, parched and uneasy; a general irritability of the whole nervous system succeeds; the head now feels confused and heavy; objects appear dim and confused, and sounds are either dull and indistinct, or painfully annoying. In a few hours more the whole muscular system is tremulous and relaxed, or rigidly spasmodic, while an indescribable sensation of restlessness, lifelessness and anxiety ago-

nizes the whole frame. Not unfrequently the miserable sufferer staggers like an inebriate, or walks with a stiffness and inflexibility painful to himself and strange to the spectator. A violent headache next comes on, or an intoleraable oppression weighs down every sense. The mind is sad, gloomy, and half delirious, and thoughts of suicide are no strange visitors. The eyes appear dull and sunken, the face has a waxen and expressionless aspect, and the whole countenance is ghastly and horror-stricken. On retiring to rest, the sufferer finds strange phantoms and spectres dire, instead of sleep, hovering around the bed. The bed itself seems to toss and tumble like the cross waves of a turbulent sea. Ghosts and goblins, spooks and apparitions, haunt his brain. All through the long night do these fiends of a disordered nervous system play their fantastic tricks to his torment; and as the morning dawns, the wretched victim of a miserable habit feels utterly prostrated; and although he may still be determined to persevere in his abstinence, and suffer through, he finds it almost impossible to think of anything but tobacco; while every perverted, enraged and rabid instinct is crying out: 'A cud! a cud! my kingdom for a cud!' I have known persons endure two or three nights of such torment, before the demons of a tobacco-poisoned brain would take their final departure, and leave the enslaved wretch once again a freedman. But depart they did, and depart they always will, sooner or later, never to return, so long as the emancipated individual obeys the mandate of God and Nature in relation to the unclean thing, which reads: 'Touch not, taste not, handle not.'"

As an aid to the cure of the habit, very plain and easily digested food should be used, and spices of every kind, mustard, pepper, salt, etc., should be avoided. The body, from head to foot, should be bathed daily. Substituting such articles as chamomile flowers, gentian root, tobacco antidotes, etc., should not be resorted to, as they frequently do harm—never any good. Everything in the form of stimulants—such as tea, coffee, beer, and all kinds of alcoholic liquors—should be firmly avoided. The giving up of one bad habit by adopting another, is, at the best,

but a cowardly subterfuge—a strategy that sooner or later carries with it destruction."

Should a confirmed tobacco-user imagine, on giving up its use, that it will greatly disable him, he should secure the services of some staunch friend, who will stand by him and assist him by word and deed, until he returns to a healthy and natural state of body and mind. During this change the body should be purified by daily baths, the blood should be renewed by very plain and simple food, eaten at regular intervals and only in moderate quantities. When headache is present, cloths dipped in cold water should be applied to the head, while the feet should be placed for a few minutes in warm water. When thirst is present, water only should be used; and sometimes, when it is swallowed slightly warmed, it will greatly ease the pain. In addition, rest and quiet should be enjoined.

Determination, perseverance, and high moral resolves, continued for three or four weeks, will result triumphantly. *It cannot help doing so.* The struggle of the sufferer may be terrible—he may

even feel like death. But there is no danger of dying; such a result has never yet happened. Though the pain and misery is intense, its duration is but short, and when once over the bridge that spans the great chasm of reaction, the smoker or chewer can raise his voice aloud and shout: "I am purged of the vile weed; I am free; I am clean; and as long as I live I will continue to be so!"



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